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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,336	02/28/2002	Dieter Kerner	39509-177800	5608
26694	7590	10/23/2007		
VENABLE LLP P.O. BOX 34385 WASHINGTON, DC 20043-9998			EXAMINER ZIMMER, MARC S	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 10/23/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	Application No.	Applicant(s)	
	10/084,336	KERNER ET AL.	
	Examiner	Art Unit	
	Marc S. Zimmer	1712	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 15 October 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: \_\_\_\_\_.
- Claim(s) objected to: \_\_\_\_\_.
- Claim(s) rejected: \_\_\_\_\_.
- Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attached.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_
13. ☐ Other: \_\_\_\_\_.

Applicant is advised that their amendment will not be entered at least for the reason that specific embodiments of the treating agent had not been expressly disclosed. That is to say, previous incarnations of the claims disclosed numerous genus of organosilicon compounds of which, for instance, aminopropyltriethoxysilane was one embodiment. However, the Examiner had not been previously required to find that particular compound in the context of being a treating agent hence Applicant's amendments raise new issues.

Incidentally, octyltrimethoxysilane is not a cyclic polysiloxane as it is purported to be in claim 8.

Applicant continues to dispute the validity of the Examiner's combination. The Examiner has thoroughly reviewed the prosecution history and no reason for withdrawal of this rejection was discovered. Indeed, *Wypych* motivates the skilled artisan to treat the oxide filler (as do hundreds of other references) when it is to be incorporated into a polymer matrix and *Penneck*, *Cyprien Guy*, and *Herzig* establish equivalency between the silanes mentioned by *Wypych* and some of the other classes of organosilicon materials that are/were claimed. That is to say, they illustrate that various types of organosilicon compound may be used interchangeably in the same capacity.

As for Applicant's alleged showing of unexpected results, Applicant contends that the Examiner relies merely on conjecture when asserting that the results documented in the declaration are not, in fact, unexpected. Applicants requests that the Examiner

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provide a "factually-based" rationale in support of his claim that the documented improvements, e.g. better optical properties and rheological properties, would have been expected upon treating the oxide filler with an organosilicon compound like those shown. Accordingly, the Examiner has furnished the following references all of which validate earlier statements that these properties are not unexpected. Relevant parts of these disclosures are being provided for Applicant's review.

Caradori et al., U.S. patent # 6,288,143 (abstract), Eguchi et al., U.S. Patent # 5,739,199 and Bergstrom et al., U.S. patent # 6,384,125 all verify that treatment of fillers similar to those of the instant invention with organosilicon compounds serves to reduce the aggregation that leads to worsened optical properties, rheology, etc.

Burns, U.S. patent # 6,051,672 and Canpoint et al., U.S. Patent # 6,462,104 verify that rheological properties, i.e. lower viscosity, are improved when silica is treated with an organosilicon compound because aggregation is precluded. Burns also indicates that optical properties are improved. See column 1 of Canpont where the structuring phenomenon is identified as a problem associated with untreated fillers (those having a high surface silanol content).

Lutz et al., U.S. patent # 4,344,800, further confirms (as did Burns) that agglomerated filler has a deleterious effect on optical properties due to the ability of these larger particles to scatter light.

A valid conclusion from the collective teachings of these references is that treatment of these inorganic oxide fillers with an organosilicon compound will improve each of the properties alleged to be unexpected because (i) it is aggregation of the filler within the polymer matrix that worsens these properties and (ii) the organosilicon compounds reduce the extent to which the fillers will aggregate. Further improvements of some of the other properties emphasized by Applicant flow logically from what is already known about the behavior of untreated silica versus treated silica when added to a polymer material.

It should be noted that the Examiner limited his demonstration to the impact of these fillers in a silicone matrix since that was the polymer employed in Applicant's experiments however many of these same disadvantages would exist were an untreated metal oxide filler to be blended into any of numerous polymer materials. Indeed, the Examiner could have produced dozens of references that described these same phenomena but limited the number of documents mentioned in the name of brevity.

Applicant is advised that the Examiner cannot conceive of any way in which he might envision withdrawing the art rejections of record relying only on the arguments/experiments set forth by Applicant. The rejection is eminently reasonable and the Examiner's positions are now firmly supported with prior art. The Examiner had

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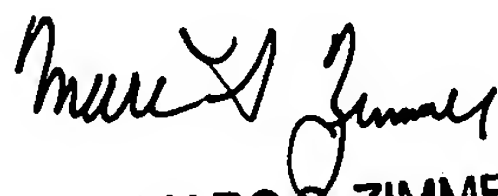
earlier deemed it acceptable to essentially take notice that the alleged unexpected observations were, in fact, expected since they similar observations have been offered repeatedly in the prior art. Even then, the Examiner offered precisely the same rationales that are taught by the prior art cited herein.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 571-272-1096. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

October 19, 2007

  
MARC S. ZIMMER  
PRIMARY EXAMINER